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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/843,070	04/26/2001	Dwip N. Banerjee	AUS920010179US1	8485
45440	7590	03/24/2005	EXAMINER	
IBM CORPORATION (SS) C/O STREETS & STEELE 13831 NORTHWEST FREEWAY, SUITE 355 HOUSTON, TX 77040			WOO, RICHARD SUKYOON	
			ART UNIT	PAPER NUMBER
			3639	

DATE MAILED: 03/24/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)	
	09/843,070	BANERJEE ET AL.	
	Examiner	Art Unit	
	Richard Woo	3629	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is FINAL.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-33 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-33 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |  |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date ____ | 6) <input type="checkbox"/> Other: ____  |

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## DETAILED ACTION

### *Claim Rejections - 35 USC § 101*

- 1) 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

- 2) Claims 1-11 and 22-33 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

As an initial matter, the United States Constitution under Art. I, §8, cl. 8 gave Congress the power to "[p]romote the progress of science and useful arts, by securing for limited times to authors and inventors the exclusive right to their respective writings and discoveries". In carrying out this power, Congress authorized under 35 U.S.C. §101 a grant of a patent to "[w]hoever invents or discovers any new and useful process, machine, manufacture, or composition or matter, or any new and useful improvement thereof." Therefore, a fundamental premise is that a patent is a statutorily created vehicle for Congress to confer an exclusive right to the inventors for "inventions" that promote the progress of "science and the useful arts". The phrase "technological arts" has been created and used by the courts to offer another view of the term "useful arts". See *In re Musgrave*, 167 USPQ (BNA) 280 (CCPA 1970). Hence, the first test of whether an invention is eligible for a patent is to determine if the invention is within the "technological arts".

Further, despite the express language of §101, several judicially created exceptions have been established to exclude certain subject matter as being patentable subject matter covered by §101. These exceptions include "laws of nature", "natural

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phenomena", and "abstract ideas". See *Diamond v. Diehr*, 450, U.S. 175, 185, 209 USPQ (BNA) 1, 7 (1981). However, courts have found that even if an invention incorporates abstract ideas, such as mathematical algorithms, the invention may nevertheless be statutory subject matter if the invention as a whole produces a "useful, concrete and tangible result." See *State Street Bank & Trust Co. v. Signature Financial Group, Inc.* 149 F.3d 1368, 1973, 47 USPQ2d (BNA) 1596 (Fed. Cir. 1998).

This "two prong" test was evident when the Court of Customs and Patent Appeals (CCPA) decided an appeal from the Board of Patent Appeals and Interferences (BPAI). See *In re Toma*, 197 USPQ (BNA) 852 (CCPA 1978). In *Toma*, the court held that the recited mathematical algorithm did not render the claim as a whole non-statutory using the Freeman-Walter-Abele test as applied to *Gottschalk v. Benson*, 409 U.S. 63, 175 USPQ (BNA) 673 (1972). Additionally, the court decided separately on the issue of the "technological arts". The court developed a "technological arts" analysis:

The "technological" or "useful" arts inquiry must focus on whether the claimed subject matter...is statutory, not on whether the product of the claimed subject matter...is statutory, not on whether the prior art which the claimed subject matter purports to replace...is statutory, and not on whether the claimed subject matter is presently perceived to be an improvement over the prior art, e.g., whether it "enhances" the operation of a machine. *In re Toma* at 857.

In *Toma*, the claimed invention was a computer program for translating a source human language (e.g., Russian) into a target human language (e.g., English). The court found that the claimed computer implemented process was within the "technological art"

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because the claimed invention was an operation being performed by a computer within a computer.

The decision in *State Street Bank & Trust Co. v. Signature Financial Group, Inc.* never addressed this prong of the test. In *State Street Bank & Trust Co.*, the court found that the "mathematical exception" using the Freeman-Walter-Abele test has little, if any, application to determining the presence of statutory subject matter but rather, statutory subject matter should be based on whether the operation produces a "useful, concrete and tangible result". See *State Street Bank & Trust Co.* at 1374. Furthermore, the court found that there was no "business method exception" since the court decisions that purported to create such exceptions were based on novelty or lack of enablement issues and not on statutory grounds. Therefore, the court held that "[w]hether the patent's claims are too broad to be patentable is not to be judged under §101, but rather under §§102, 103 and 112." See *State Street Bank & Trust Co.* at 1377. Both of these analysis goes towards whether the claimed invention is non-statutory because of the presence of an abstract idea. Indeed, *State Street* abolished the Freeman-Walter-Abele test used in *Toma*. However, *State Street* never addressed the second part of the analysis, i.e., the "technological arts" test established in *Toma* because the invention in *State Street* (i.e., a computerized system for determining the year-end income, expense, and capital gain or loss for the portfolio) was already determined to be within the technological arts under the *Toma* test. This dichotomy has been recently acknowledged by the Board of Patent Appeals and Interferences (BPAI) in affirming a

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§101 rejection finding the claimed invention to be non-statutory. See *Ex parte Bowman*, 61 USPQ2d (BNA) 1669 (BdPatApp&Int 2001).

In the instant application, there is no significant claim recitation of the data processing system or calculating computer to show the significant change in the data or for performing calculation operations in Claims 1, 11, 32 and 33.

In Claim 22, the computer program itself can not be directed to a practical application of the invention in the useful art to accomplish a concrete, useful, and tangible result. When the computer program is actually executed by the computer, the claimed subject matter produces a useful, concrete and tangible result. The mere recitation of "embodied on a computer readable medium" cannot constitute the actual execution done by the computer system.

### ***Claim Rejections - 35 USC § 102***

3) Claims 1-33 are rejected under 35 U.S.C. 102(e) as being anticipated by Halliday et al. (US 2002/0083003).

As for Claim 1, Halliday et al. discloses a method for pricing access to e-content comprising:

tracking one or more usage characteristics of an individual's access to e-content (see abstract; see paragraphs [0054]-[0059]), wherein the one or more usage characteristics are selected from the group consisting of quantity of e-content accessed,

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quantity of time spent accessing the e-content, nature of the e-content, and combinations thereof (see paragraph [0104]); and

charging the individual a price that is determined as a predetermined function of the one or more usage characteristics (see Id.).

As for Claim 2, Halliday et al. further disclose the method, further comprising:

establishing a usage profile for the individual (see paragraph [0055]);

storing in the usage profile the one or more usage characteristics tracked during a first session (see paragraph [0056]); and

updating the usage profile to reflect the one or more usage characteristics tracked during a subsequent session (see paragraphs [0058]-[0059]).

As for Claim 3, Halliday et al. further discloses the method, wherein the step of updating the usage profile includes accumulating the one or more usage characteristics over a plurality of sessions (see Supra paragraphs).

As for Claim 4, Halliday et al. further discloses the method, wherein the price is determined as a predetermined function of the one or more usage characteristics of the current session, the one or more accumulated usage characteristics, or a combination thereof (see paragraphs [0058]-[0059], [0104]).

As for Claim 5, Halliday et al. further discloses the method, wherein the predetermined function is a non-linear function (see Supra charging method that does not have linear relationship to any data).

As for Claim 6, Halliday et al. further discloses the method, further comprising:

transmitting the e-content to a computer along with a usage tracker for performing the step of tracking one or more usage characteristics (see paragraph [0056]); and

accepting return of the e-content from the computer along with the one or more usage characteristics (see Id.).

As for Claim 7, Halliday et al. further discloses the method, wherein the step of accepting return includes receiving the entire e-content (see claim 4).

As for Claim 8, Halliday et al. further discloses the method, wherein the step of accepting return includes deleting the e-content from the individual's computer (see paragraph [0013]).

As for Claim 9, Halliday et al. further discloses the method, wherein the step of accepting return includes determining whether any copies of the transmitted e-content were made (see paragraphs [0007], [0076]).

As for Claim 10, Halliday et al. further discloses the method, further comprising:

transmitting the e-content to a computer along with a usage tracker for performing the step of tracking one or more usage characteristics; and

periodically receiving messages from the usage tracker indicating a change in the one or more usage characteristics (see paragraphs [0056], [0076]).

As for Claim 11, Halliday et al. disclose a method for managing access to e-content, comprising:



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downloading e-content from a server to a client computing device along with an embedded usage tracking program (see paragraph [0056]);

monitoring, using the usage tracking program, one or more characteristic of the client's access to the e-content (see paragraphs [0056], [0071]);

transmitting, using the usage tracking program, a usage report including the one or more characteristics from the client to the server (see paragraphs [0056]-[0059], [0071]);

determining whether the client's access to the e-content exceeds an expiration set-point (see paragraph [0007]); and

upon a determination of expiration, extending the expiration set-point (see paragraph [0071]).

As for Claim 12, Halliday et al. discloses a computer system comprising:

tracking means for tracking one or more usage characteristics of an individual's access to e-content, wherein the one or more usage characteristics are selected from the group consisting of quantity of e-content accessed, quantity of time spent accessing the e-content, nature of the e-content, and combinations thereof (see abstract; see paragraphs [0054]-[0059]); and

charging means for charging the individual a price that is determined as a predetermined function of the one or more usage characteristics (see Supra paragraphs and [0104]).

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As for Claim 13, Halliday et al. further discloses the system comprising:

establishing means for establishing a usage profile for the individual (see paragraph [0055]);

storing means for storing in the usage profile the one or more usage characteristics tracked during a first session (see the storage means in Fig. 3); and

updating means (processor in Fig. 3) for updating the usage profile to reflect the one or more usage characteristics tracked during a subsequent session.

As for Claim 14, Halliday et al. further discloses the system, wherein the updating means includes accumulating means for accumulating the one or more usage characteristics over a plurality of sessions (see Supra paragraphs [0054]-[0059]).

As for Claim 15, Halliday et al. further discloses the system, wherein the price is determined as a predetermined function of the one or more usage characteristics of the current session, the one or more accumulated usage characteristics, or a combination thereof (see paragraphs [0058]-[0059], [0104]).

As for Claim 16, Halliday et al. further discloses the system, wherein the predetermined function is a non-linear function (see Supra charging method that does not have linear relationship to any data).

As for Claim 17, Halliday et al. further discloses the system, further comprising:

transmitting means for transmitting the e-content to a computer along with a usage tracker for performing the step of tracking one or more usage characteristics (see paragraph [0056]); and

accepting means for accepting return of the e-content from the computer along with the one or more usage characteristics (see Id.).

As for Claim 18, Halliday et al. further discloses the system, wherein the accepting means includes receiving means for receiving the entire e-content (see claim 4).

As for Claim 19, Halliday et al. further discloses the system, wherein the accepting means includes deleting means for deleting the e-content from the individual's computer (see paragraph [0013]).

As for Claim 20, Halliday et al. further discloses the system, wherein the accepting means includes determining means for determining whether any copies of the transmitted e-content were made (see paragraphs [0007], [0076]).

As for Claim 21, Halliday et al. further discloses the system, further comprising:

transmitting means for transmitting the e-content to a computer along with a usage tracker for performing the step of tracking one or more usage characteristics; and

receiving means for periodically receiving messages from the usage tracker indicating a change in the one or more usage characteristics (see paragraphs [0056], [0076]).

As for Claim 22, Halliday et al. discloses a computer program product including instructions embodied on a computer readable medium, the instructions comprising:

tracking means for tracking one or more usage characteristics of an individual's access to e-content, wherein the one or more usage characteristics are selected from the group consisting of quantity of e-content accessed, quantity of time

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spent accessing the e-content, nature of the e-content, and combinations thereof (see abstract; see paragraphs [0054]-[0059]); and

charging means for charging the individual a price that is determined as a predetermined function of the one or more usage characteristics (see Supra paragraphs and [0104]).

As for Claim 23, Halliday et al. further discloses the computer program product, further comprising:

establishing instructions for establishing a usage profile for the individual (see paragraph [0055]);

storing instructions for storing in the usage profile the one or more usage characteristics tracked during a first session (see the storage means in Fig. 3); and

updating instructions (processor in Fig. 3) for updating the usage profile to reflect the one or more usage characteristics tracked during a subsequent session.

As for Claim 24, Halliday et al. further discloses the computer program product, wherein the updating instructions include accumulating instructions for accumulating the one or more usage characteristics over a plurality of sessions (see Supra paragraphs [0054]-[0059]).

As for Claim 25, Halliday et al. further discloses the computer program product, wherein the price is determined as a predetermined function of the one or more usage characteristics of the current session, the one or more accumulated usage characteristics, or a combination thereof (see paragraphs [0058]-[0059], [0104]).

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As for Claim 26, Halliday et al. further discloses the computer program product, wherein the predetermined function is a non-linear function (see Supra charging method that does not have linear relationship to any data).

As for Claim 27, Halliday et al. further discloses the computer program product, further comprising:

transmitting instructions for transmitting the e-content to a computer along with a usage tracker for performing the step of tracking one or more usage characteristics (see paragraph [0056]); and

accepting instructions for accepting return of the e-content from the computer along with the one or more usage characteristics (see Id.).

As for Claim 28, Halliday et al. further discloses the computer program product, wherein the accepting instructions includes receiving means for receiving the entire e-content (see claim 4).

As for Claim 29, Halliday et al. further discloses the computer program product, wherein the accepting instructions includes deleting means for deleting the e-content from the individual's computer (see paragraph [0013]).

As for Claim 30, Halliday et al. further discloses the computer program product, wherein the accepting instructions for determining whether any copies of the transmitted e-content were made (see paragraphs [0007], [0076]).

As for Claim 31, Halliday et al. further discloses the computer program product, further comprising:

transmitting instructions for transmitting the e-content to a computer along with a usage tracker for performing the step of tracking one or more usage characteristics; and receiving instructions for periodically receiving messages from the usage tracker indicating a change in the one or more usage characteristics (see paragraphs [0056], [0076]).

As for Claim 32, Halliday et al. discloses a method for providing access to e-content on a server, comprising:

transmitting e-content from the server to a client computing device along with an embedded usage tracking program (see paragraph [0056]); receiving the usage report from the usage tracking program, one or more characteristic of the client's access to the e-content (see paragraphs [0056]-[0059], [0071]);

determining whether the client's access to the e-content exceeds an expiration set-point (see paragraph [0007]); and

upon a determination of expiration, extending the expiration set-point (see paragraph [0071]).

As for Claim 33, Halliday et al. discloses a method for accessing e-content on a server, comprising:

requesting access to e-content on the server (see paragraph [0055]);

downloading e-content from a server to a client computing device along with an embedded usage tracking program (see paragraph [0056]);

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monitoring, using the usage tracking program, one or more characteristic of the client's access to the e-content (see paragraphs [0056], [0071]);

transmitting, using the usage tracking program, a usage report including the one or more characteristics from the client to the server (see paragraphs [0056]-[0059], [0071]); and

receiving an expiration notice from the server when access to the e-content exceeds an expiration set-point (see paragraph [0014]).

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

US 6,249,865 is cited to show a method and system for a user to access digital data provided by an online server over a data network, and for allowing a billing system separate from the online server to charge the user for access to the digital data.

US 6,349,289 is cited to show a system and method for monitoring remote computer access and associated costs. The system includes a remotely located server in communication with multiple host computer networks and with a network access server.

US 2002/0194140 is cited to show a system for redirecting a user requesting premium content from a content provider to a service provider with which the user may have or may create an account.

US 5,956,697 is cited to show a timer-based fee charging system for internet services, the system allowing instant access to internet connections services through an easy access and payment method.

US 2001/0044786 is cited to show a content usage management system and method for use in a content transaction system for distributing various items of content information, such as music, digital video, etc., or via a network, and for collecting the usage fee charged for the use of the content from the users or providing usage points to the user.

US 6,202,056 is cited to show a method for computer network operation providing basis for usage fees, the fees including copyright royalties for audio, video and other works recoded in digital format.

WO 98/10382 is cited to show a system and method for performing billing for transactions conducted over the internet. A billing platform receives a signal indicating the cost of the transactions and the connection ID associated with the transactions, then accesses the database to bill the user in accordance with the user's pre-established billing means.

JP 08-166989 is cited to show a usage charge system to execute the collection of an information usage charge without intermediary of manual aid by charging the usage charge of information stored in database by using a charging function using a charging network.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Richard Woo whose telephone number is 571-272-

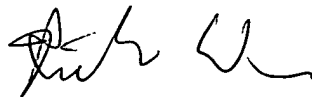


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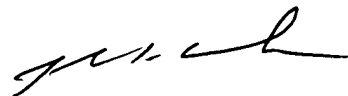
6813. The examiner can normally be reached on Monday-Friday from 8:30 AM -5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Weiss can be reached on 571-272-6812. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Richard Woo  
Patent Examiner  
Art Unit 3629  
March 19, 2005



JOHN G. WEISS  
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TECHNOLOGY CENTER 3300